

**DEVAL L. PATRICK** GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts Executive Office of Health and Human Services Department of Public Health William A. Hinton State Laboratory Institute

305 South Street, Jamaica Plain, MA 02130

07/07/2011

Christina Corda Assistant District Attorney, Suffolk County

Dear ADA Corda,

Enclosed is the information you requested in regards to Commonwealth vs. are copies of the following:

Included

- 1. Curriculum Vitae for Annie Dookhan and Della Saunders.
- 2. Drug Analysis Laboratory Receipt.
- 3. Control Cards with analytical results for samples #



- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #



Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Della Saunders was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Dookhan

Chemist II

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

#### Curriculum Vitae

## Annie Khan (Dookhan)

#### Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

## Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \* Responsible for the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

OC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept, and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

## **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

#### Della Saunders

#### Education:

Boston University Boston, MA. Bachelors of Arts in Chemistry 1982

# Experience:

1985-present: Currently Chemist III Massachusetts Department of Public Health Drug Analysis Laboratory at State Laboratory Institute Boston, MA. Responsible for analyzing unknown substances submitted by Massachusetts law enforcement agencies; operating, maintaining, and interpreting data from analytical equipment (analytical balance, microscope, gas chromatogram, ultraviolet spectrometer, infrared spectrometer, gas chromatogram/mass spectrometer); training junior level chemists; providing expert testimony to local, state, and federal courts in the Commonwealth of Massachusetts.

1984-1985: Laboratory Technician in the Media Laboratory at State Laboratory Institute Boston, MA. Responsible for making chemical reagents and media plates; operating and maintaining laboratory equipment (autoclave, pH meter, ultra-violet hood), and collecting safety data for laboratory protocols.

# Training:

1985: Six week training with Senior Staff at Massachusetts Department of Public Health (MDPH) Drug Analysis Laboratory Boston, MA. Appointed Assistant Analyst MDPH

1987: One week training course in drug analysis given by the Federal Drug Enforcement Agency (DEA) McLean, VA.

1992: Training in Gas Chromatograph/Mass Spectroscopy (GC/MS) Hewlett Packard (Agilent)

1996: Training in Fourier Transform Infra-Red Spectroscopy ETA (Analect)

2001: Expert Witness Workshop National Laboratory Training network Quality Assurance/Quality Control Training (MDPH)

2002: Techniques of Supervision Training (MDPH)

1999: Notary Public Commonwealth of Massachusetts



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|--------------|--|
| воок #_72    |  |
| PAGE # / 5 5 |  |
|              |  |

| DEPARTMENT                             |      | N#_/X                                   |               |  |  |
|--|------|---|---------------|--|--|
| DRUG RECEIPT                           |      | E#_/55                                  |               |  |  |
|  | DEST | RUCTION #                               |               | **************************************   |  |
| District/Unit <u>C//</u> 2 F           |      |   |               |  |  |
| Name & Rank of Arresting Officer TRull | Dona | hu                                      | ID#_9972      | 5  |  |
|  |      |   |               |  |  |
| DEFENDANT'S NAME                       | ADDI | RESS                                    | CITY          | STATE  |  |
|  |      |   | Dovekeste     | 1426   |  |
|  |      |   | -             |  |  |
|  |      |   |               |  |  |
|  |      |   | LAB US        | E ONLY   |  |
| DESCRIPTION OF ITEMS SUBMITTED         |      | GROSS                                   | GROSS         | ANALYSIS   |  |
|  | 2/1/ | QUANTITY                                | WEIGHT        | NUMBER   |  |
| Crack Coconing Roc                     | K in | 53 Plais                                | 6,26n         |  |  |
|  |      | //-                                     |               |  |  |
|  |      | 117771111111111111111111111111111111111 |               |  |  |
|  |      |   |               |  |  |
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|  |      |   |               |  |  |
|  |      |   |               |  |  |
|  | 1    |   |               | THE MECHANICAL COCCURRENCE CONTROL CON |  |
| To be completed by ECU personnel only  | 4    |   |               |  |  |
| Name and Rank of Submitting Officer    | Mina | 1/2/                                    | ID# _937      | J  |  |
| Received by                            | LO   | V U                                     | Date          | )<br> -  |  |
| - ,                                    |      |   | ECU Control # | <i>t</i> /   |  |
| 3PD Form 0038-BIS-0907 (prev. 1753)    |      |   | 200 0001 11   | <b>a</b> . 447.55  |  |

No.

Date Analyzed: MAR 21 2011

City: Boston D.C.U. Police Dept.

Officer: P.O. Diana Lopez

Def:

Amount: No. Cont:

Cont: pb

Date Rec'd: 01/11/2011

Gross Wt.: 6.26

No. Analyzed: \

Net Weight: 0.21

Subst: SUB

# Tests: 6 980

42/If

Prelim: Cocauce @

Findings: COCAME

# DRUG POWDER ANALYSIS FORM

| No. of samples tested:  | HCY BOSAPT ANALYST AND Evidence Wt   |
|---|--|
| PHYSICAL DESCRIPTION:   | Gross Wt (3): 0.9620  SCUSSANCE Gross Wt (1): 6.3396  Pkg. Wt:  Net Wt: 0.2131 |
| PRELIMINARY TESTS Spot Tests  Cobalt Thiocyanate ( ) \rightarrow  Marquis  Froehde's  Mecke's | Microcrystalline Tests  Gold Chloride →  TLTA ( ~) →  OTHER TESTS              |
| PRELIMINARY TEST RESULTS  RESULTS COcaro  DATE 3-16-11  | GC/MS CONFIRMATORY TEST  RESULTS CO COMB  MS OPERATOR DOS                      |

# Area Percent / Library Search Report

Information from Data File:

File Name : D:\SYSTEM4\03\_17\_11\777166.D

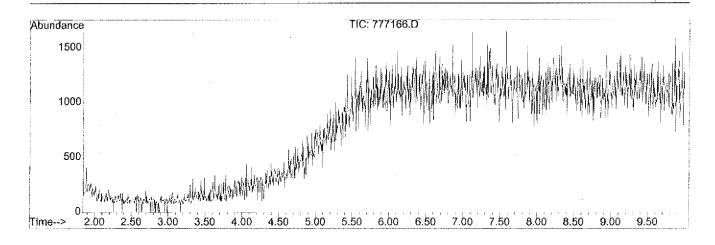
Operator : DCS

Date Acquired : 18 Mar 2011 00:06

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

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Page 1

Fri Jul 01 13:38:08 2011

777166.D

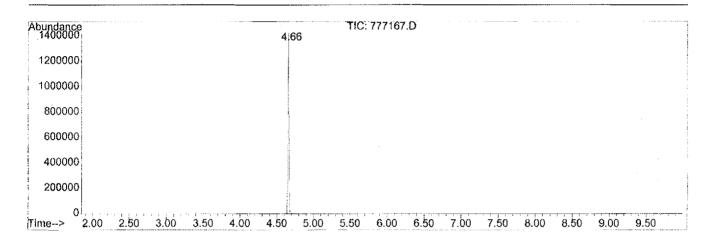
File Name : D:\SYSTEM4\03\_17\_11\777167.D

Operator : DCS

Date Acquired : 18 Mar 2011 00:19 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 67 AcquisitionMeth: DRUGS Integrator : RTE



| Ret. Time | Area    | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.656     | 1262795 | 100.00 | 100.00  |

File Name : D:\SYSTEM4\03 17 11\777167.D

Operator : DCS

Date Acquired : 18 Mar 2011 00:19 Sample Name : COCAINE STANDARD

Submitted by :

Vial Number : 67 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

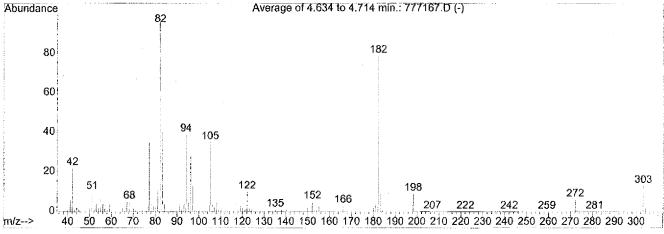
C:\DATABASE\NIST98.L

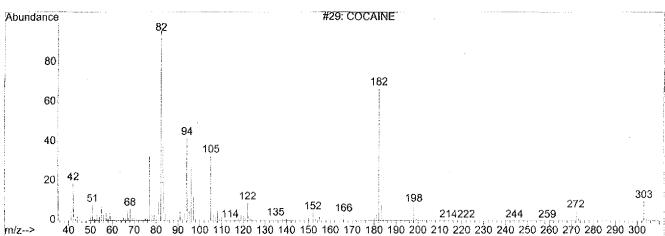
| PK# | RT   | Library/ID        | CAS# | Qual |
|-----|------|-------------------|------|------|
|     |      |                   |      | M    |
| 1   | 4.66 | C:\DATABASE\SLT.L |      |      |

1 4.66 C:\DATABASE\SLI.L COCAINE

000050-36-2

99





777167.D

Fri Jul 01 13:38:11 2011

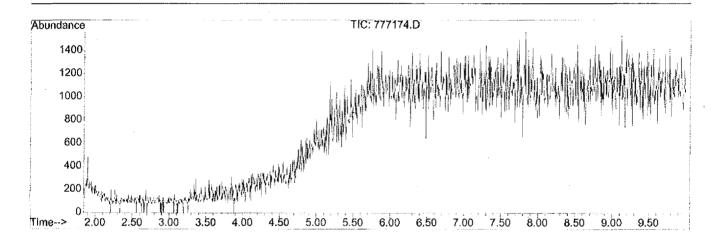
Page 2

File Name : D:\SYSTEM4\03\_17\_11\777174.D

Operator : DCS

Date Acquired : 18 Mar 2011 1:56

Sample Name : BLANK Submitted by : ASD Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

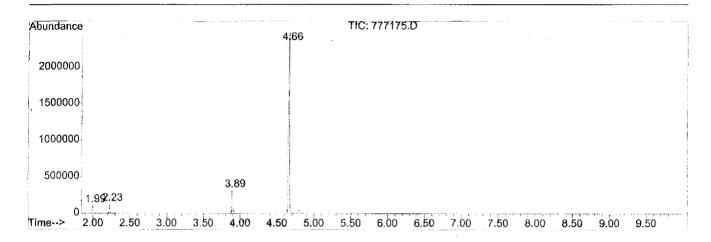
File Name : D:\SYSTEM4\03 17 11\777175.D

Operator : DCS

Date Acquired : 18 Mar 2011 2:10

Sample Name :

Submitted by : ASD
Vial Number : 75
AcquisitionMeth: DRUGS
Integrator : RTE



| Ret. Time | Area    | Area % | Ratio % |  |
|-----------|---------|--------|---------|--|
| 1 000     | 122560  | 2 00   | 4 05    |  |
| 1.993     | 133560  | 3.99   | 4.87    |  |
| 2,225     | 117033  | 3.50   | 4.27    |  |
| 3.891     | 351377  | 10.51  | 12.82   |  |
| 4.664     | 2741562 | 82.00  | 100.00  |  |
|           |         |        |         |  |

File Name : D:\SYSTEM4\03\_17\_11\777175.D

Operator : DCS

Date Acquired : 18 Mar 2011 2:10

Sample Name :

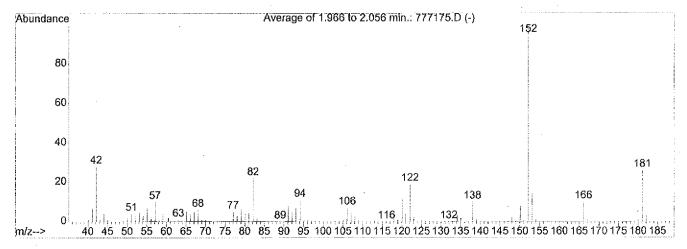
Submitted by : ASD
Vial Number : 75
AcquisitionMeth: DRUGS
Integrator : RTE

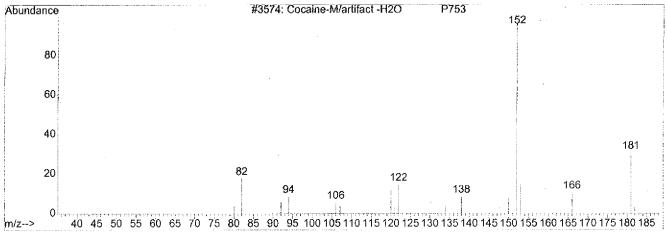
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

| PK# | RT   | Library/ID  |      | CAS#                                      | Qual           |
|-----|------|---|------|---|----------------|
| 1   | 1.99 | C:\DATABASE\PMW_TOX2.L<br>Cocaine-M/artifact -H2O<br>MDA-M (desmethylenyl-methyl-) Metipranolol-M/artifact AC | ME @ | 000000-00-0<br>000000-00-0<br>000000-00-0 | 96<br>37<br>23 |





777175.D

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Page 2

File Name : D:\SYSTEM4\03 17 11\777175.D

Operator : DCS

Date Acquired : <u>18 Mar 201</u>1 2:10

Sample Name :

Submitted by : ASD
Vial Number : 75
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

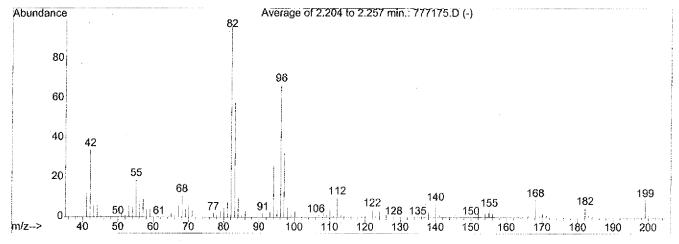
Minimum Quality: 90

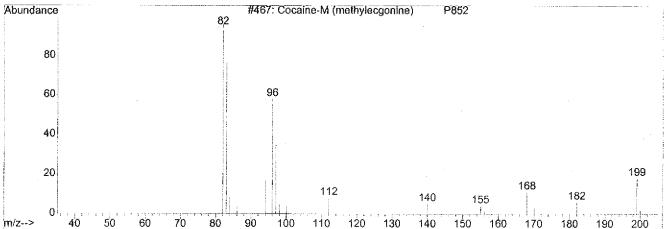
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

| PK# | RT   | Library/ID  |    | CAS#                                      | Qual           |
|-----|------|---|----|---|----------------|
| 2   | 2.23 | C:\DATABASE\PMW_TOX2.L<br>Cocaine-M (methylecgonine)<br>Cocaine-M (methylecgonine)<br>Cocaine | AC | 007143-09-1<br>000000-00-0<br>000050-36-2 | 97<br>40<br>36 |





777175.D

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Page 3

File Name : D:\SYSTEM4\03\_17\_11\777175.D

Operator : DCS

Date Acquired : 18 Mar 2011 2:10

Sample Name :

Submitted by : ASD
Vial Number : 75
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

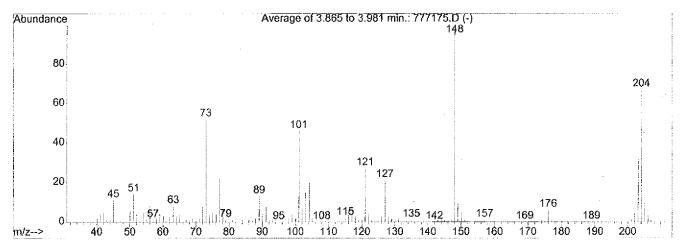
Minimum Quality: 90

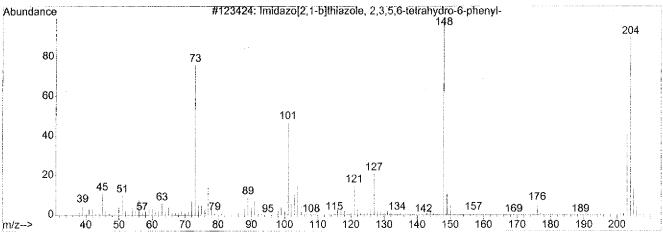
C:\DATABASE\PMW\_TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

| PK#   | RT   | Library/ID                         |             | CAS#        | Qual |
|-------|------|------------------------------------|-------------|-------------|------|
| <br>3 | 3.89 | C:\DATABASE\NIST98.L               |             | 004640 00 4 |      |
|       |      | Imidazo[2,1-b]thiazole,            |             |             | 98   |
|       |      | <pre>Imidazo[2,1-b]thiazole,</pre> | 2,3,5,6-tet | 006649-23-6 | 98   |
|       |      | Imidazo[2,1-b]thiazole,            | 2,3,5,6-tet | 006649-23-6 | 98   |





777175.D

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Page 4

File Name : D:\SYSTEM4\03 17 11\777175.D

Operator : DCS

Date Acquired : 18 Mar 2011 2:10

Sample Name :

Submitted by : ASD
Vial Number : 75
AcquisitionMeth: DRUGS
Integrator : RTE

67

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90

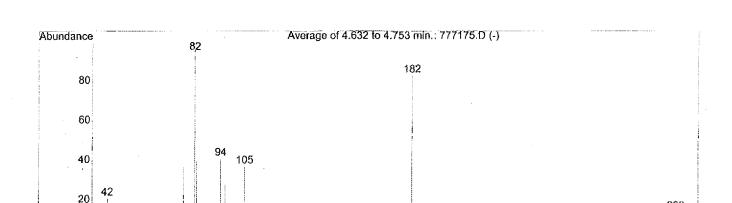
C:\DATABASE\PMW TOX2.L

Minimum Quality: 90

C:\DATABASE\NIST98.L

122

| PK# | RT   | Library/ID        | CAS#        | Qual |
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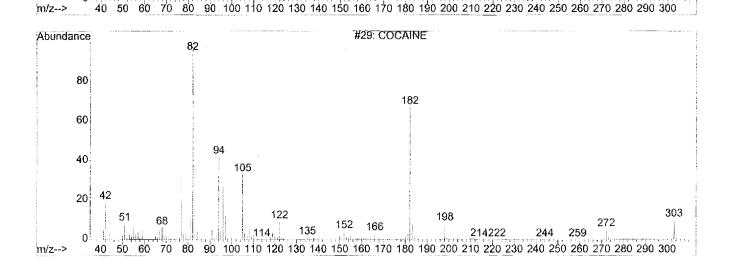


131 140 152 166

198

207

242



777175.D

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303

# Area Percent / Library Search Report

Information from Data File:

File Name : D:\SYSTEM4\03\_17\_11\777181.D

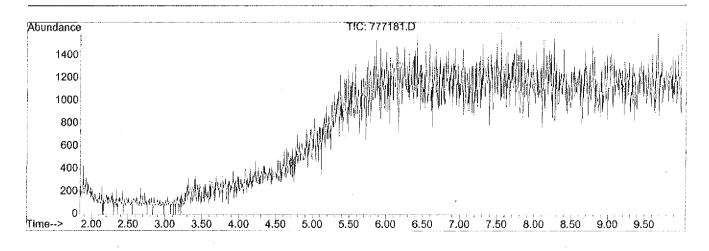
Operator : DCS

Date Acquired : 18 Mar 2011 3:32

Sample Name : BLANK

Submitted by :

Vial Number : 2 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

\*\*\*NO INTEGRATED PEAKS\*\*\*

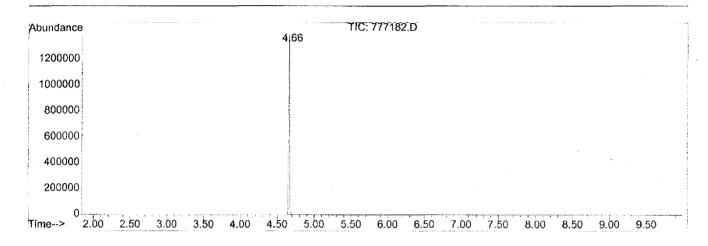
File Name : D:\SYSTEM4\03 17 11\777182.D

Operator : DCS

Date Acquired : 18 Mar 2011 3:46 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 82 AcquisitionMeth: DRUGS Integrator : RTE



| Ret. Time | Area    | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.657     | 1269405 | 100.00 | 100.00  |

File Name : D:\SYSTEM4\03\_17\_11\777182.D

Operator : DCS

Date Acquired : 18 Mar 2011 3:46 Sample Name COCAINE STANDARD

Submitted by

Vial Number AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90 Minimum Quality: 90

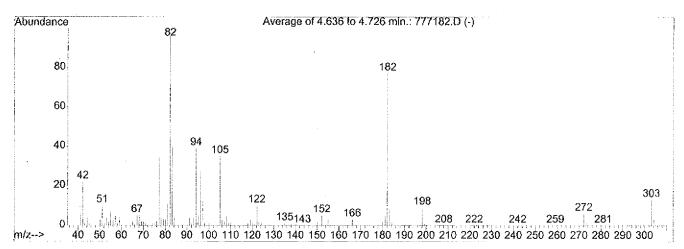
C:\DATABASE\PMW TOX2.L

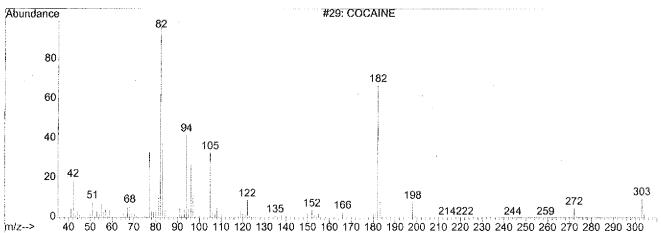
C:\DATABASE\NIST98.L

PK# RTLibrary/ID CAS# Qual

1 4.66 C:\DATABASE\SLI.L

COCAINE 000050-36-2 99





777182.D

Fri Jul 01 13:38:46 2011

2 Page